{Special editorial note: This strikethrough/underline draft regulation is for workshop purposes only. It uses marks to indicate changes in the May 17, 2000 preliminary draft version. Please note that formal proposed regulation, to be released in August 2000, will be a strikeout/underline version only showing changes to existing law.}

Conditional Rice Straw Burning Regulation

Title 17, Subchapter 2, Article 1 and Article 2.

Article 1

Section 80100: No Changes Proposed

Section 80101: Definitions to be Added

Biased Inspection Site means an inspection site chosen, at the discretion of a field inspector, based upon the presence or anticipated presence of disease symptoms.

<u>Unbiased Inspection Site means an inspection site at a specific location prescribed by a</u> method that does not consider the location or anticipated location of disease symptoms.

Conditional Rice Straw Burn Permit means a conditional permit issued <u>pursuant to</u> sections 41865(f) and (h) of the Health and Safety Code by an <u>Air Pollution Control</u> Officer (APCO) to conduct one burn, on one field, within one year <u>or shorter time period</u>, as specified.

<u>Conditional Rice Straw Burn Permit applicant</u> means the individual (or his/her agent) with control over the property containing the rice fields proposed for burning.

Qualified Rice Disease Inspector means any person certified in accordance with the provisions of section 81057 of this regulation, other than agriculture commissioner staff, who conducts rice disease inspections on behalf of rice growers.

Qualifying Disease means a rice disease which may cause significant yield loss and which the Secretary for the California Department of Food & Agriculture (CDFA) finds

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Revised from the May 17, 2000 Preliminary Draft Version

is controlled or effectively managed by the burning of straw, provided the ARB and

CDFA have not determined, in accordance with section 41865(h), that there are other

Nonqualifying disease means a rice disease which ARB and CDFA, have jointly

determined, based upon an annual review process, has other economically and technically

feasible alternative means of elimination that are not substantially more costly to the

conditional rice straw burn permit applicant.

Growing Season means the period of time from seedbed preparation through crop

harvest.

Quantifiable reduction in yield is defined as an estimated amount of decreased grain

production expected from a given level of disease infection. This relationship shall be

quantified in accordance with the criteria established in section 80156(d).

Significant reduction in yield Disease Significance Threshold is defined as means an

estimated amount (expressed as a percentage of diseased plants) of a qualifying disease

expected to result in a significant decreased grain production (during the current or next

growing season). equal to or exceeding X (the numeric value, X, shall be established in

this regulation) hundredweight (cwt) of rice per acre of rice planted upon the field

proposed for burning.

Sections 80102 – 80130:

No Changes Proposed

Article 2

Sections 80140 – 80155:

No Changes Proposed

New Sections of Proposed Regulation as Follows:

Section 80156:

Conditional Rice Straw Burning Permit Program for the

Sacramento Valley Air Basin.

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- (a) The Sacramento Valley Basinwide Air Pollution Control Council (Basinwide Council) shall, by December 31, 2000 January 31, 2001, develop and submit to the state board a proposed rice straw burning permit program (program) for the issuance of conditional rice straw burning permits (conditional permit) by the APCOs in the Sacramento Valley Air Basin. The program shall be adopted at a noticed public hearing of the Basinwide Council and shall implement and ensure compliance with the following requirements:
- (b) The APCOs in the Sacramento Valley Air Basin may grant conditional rice straw burning permits only after the county agricultural commissioner has completed the following:
 - {Special editorial note: This new section (b) is simply a merging and re-organization of sections (a) and (b) as presented in the May 17, 2000 preliminary draft version.

 Only changes in text are underlined for clarity.}
 - (1) <u>Dd</u>etermined, based upon inspection results, the existence of a qualifying disease that is likely to cause a significant, quantifiable reduction in yield <u>during</u> the current or next growing season.
 - (2) During the growing season, the county agricultural commissioner has

 Iindependently determined the significant presence of a pathogen in an amount sufficient to constitute a rice disease during the growing season.
 - (3) The county agricultural commissioner makes Made a written finding that the existence of the pathogen will likely cause a significant, quantifiable reduction in yield in the field proposed for burning during the current or next growing season.
 - (4) The county agricultural commissioners shall <u>Has</u> documented each applicant's compliance with the following terms and conditions:
 - (A) The fields proposed for burning are specifically described.
 - (B) The applicant has not violated any provision of California section 41865 of the Health and Safety Code section 41865 within the previous three years.
- (c) The county agricultural commissioners, including, but not limited to, the following field verification requirements: In making the finding described in sections

80156(b)(1), 80156(b)(3), and 80156(b)(4)(A), the county agricultural commissioner may accept inspection reports from qualified rice disease inspectors. Prior to making the finding, the agricultural commissioner must review and evaluate the accuracy of all inspection reports prepared by qualified rice disease inspectors and conduct field inspections as follows:

- (1) Actual field verification of at least 20 percent of all inspection reports prior to making the finding in paragraph (a), above. A minimum of 5 percent of all inspection reports based upon plant or soil sampling must be field verified.
- (2) Random on site observation of at least 5 percent of actual field inspections. All inspection reports based upon a visual inspection method (no plant or soil sampling) must be field verified.

{Special editorial note: ARB staff has significant concern over the credibility of this proposed method to inspect fields with a visual method only. The method does not result in a quantifiable estimate of disease, which is required by the law mandating this regulation. Staff will be soliciting further discussion on this issue at the July 27, 2000 workshop.}

- (d) The Basinwide Council shall establish and shall apply a quantitative methodology that will result in the county agricultural commissioners' consistent findings of quantifiable reduction in yield. The Basinwide Council, in consultation with CDFA and ARB, shall utilize an accredited agricultural scientific organization, such as the University of California Cooperative Extension, to determine the lowest level of inoculum and/or infection, for each qualifying disease, expected to result in significant reduction in rice yield (as defined in Section 80101). The scientists shall consider, but shall not be limited to, the following information:
 - (1) The available literature and ongoing research for documenting the relationship between the level of occurrence of a pathogen and the resulting reduction in the rice yields.
 - (2) The average background level of qualifying disease present in the rice fields of the Sacramento Valley Air Basin.

- (d) The county agricultural commissioner's determination of the significance of disease in an applicant's field, pursuant to section 80156(b)(3), shall be compared against the disease significance threshold. The ARB shall communicate disease significance threshold information to each county agricultural commissioner on an annual basis in accordance with section 80158(c). If no disease significance threshold is available for the specific qualifying disease impact being evaluated by a county agricultural commissioner, the county agricultural commissioner shall utilize professional judgement in determining the significance of disease in an applicant's field pursuant to section 80156(b)(3).
- (e) (1) The Basinwide Council shall develop detailed procedures for each inspection method proposed for adoption. <u>Adopted inspection methods shall be based upon</u> <u>sound field sampling principles</u>. <u>Biased or unbiased methods</u>, or <u>combinations</u> thereof, may be considered.
 - (A) Inspection methods that combine biased and unbiased inspection sites shall meet the following specifications:
 - (1) Use a maximum of one (1) biased inspection site per field.
 - (2) Collect a minimum of fifty (50) plant samples at all inspection sites.
 - (3) Maintain a minimum ratio of biased to unbiased sampling sites of one
 (1) to three (3) in fields of 50 acres or less, and one (1) to five(5) in
 fields of greater than 50 acres.
 - (4) Determine the percentage of diseased stems at each inspection site.
 - (5) Sum the percentage values from (A)(4), above, and divide the sum by the total number of inspection sites to estimate the average percentage of diseased plants in the field proposed for burning.
 - (B) Inspection methods that use only 1 biased inspection site shall be limited to fields of less than 65 acres and meet the following specifications:
 - (1) Collect a minimum of one-hundred (100) plant samples.
 - (C) Each procedure shall include, but is not limited to, the following information:
 - (1) Protocol for selecting inspection sites selection.

- (2) Number of required inspection sites.
- (3) Methods of plant/soil collection.
- (4) Methods of collection, counting, and scoring of rice plants.
- (5) Methods of collection, storage, and analysis of soil samples.
- (6) Procedures for calculating percentage of disease at specific inspection sites and use of this information to estimate average percentage of disease in a total field.
- (7) Acknowledgement of the agricultural commissioner's authority to be present to observe inspection activities and discretion to require additional inspection activities if deemed necessary.
- (ef) Certified field inspectors shall complete a field inspection reporting form for each inspection method and the grower shall submit the reporting form, with an application, to the county agricultural commissioner. Each form shall include the procedures in paragraph (e), above. The county agricultural commissioner must review and approve the submittal in accordance with the provisions of paragraph (c), above. Completed forms shall be filed in the county agricultural commissioner's office and made available for public inspection. The applicant shall submit an application form to the county agricultural commissioner to request the findings of terms and conditions identified in section 80156(b). The applications shall be available for public inspection for a period of three years. Each application form shall include, but shall not be limited to, the following information:
- (1) Applicant's name.
- (2) Applicants ID identification number.
- (3) Mailing address (property address, city, state, and zip code).
- (4) Location of inspected property.
 - (4) Business telephone and fax number.
 - (5) Total planted rice acres.
 - (7) Third party inspector information (name, license number and terms).
 - (5) Inspection site description.
 - (6) Acreage of area proposed for burning.

- (7) Estimated average disease infection level in the total area proposed for burning.
- (8) Total planted acreage.
- (6) <u>Site identification, location, acres, and disease descriptions for each field proposed for burning.</u>
- (7) A statement that inspection reports are required as an attachment to the application before it can be considered complete.
- (8) A statement authorizing the county agricultural commissioner to inspect the sites for rice disease.
 - (9) Signature of the applicant.
 - (10) A place for the signature of the agricultural commissioner verifying compliance with $\frac{3(a)-3(d)}{80156(b)(4)}$.
- (14) Signature of inspector.
- (f) Qualified rice disease inspectors shall complete a field inspection reporting form for each inspection method and the grower shall submit the reporting form, with an application, to the county agricultural commissioner. Each form shall include the procedures in paragraph 80156(e), above. The county agricultural commissioner must review and approve the submittal in accordance with the provisions of paragraphs 80156(c) and 80156(d), above. Completed forms shall be filed in the county agricultural commissioner's office and made available for public inspection for at least three years. Each inspection form shall include, but shall not be limited to, the following information:
 - (1) Applicant's name.
 - (2) Applicant's identification number.
 - (3) Mailing address (property address, city, state, and zip code).
 - (4) Business telephone and fax number.
 - (5) Location and description of inspected fields.
 - (6) Acreage of area proposed for burning.
 - (7) Percentage of diseased plants in each area of the field inspected.
 - (8) Estimated average disease infection level in the total area proposed for burning.
 - (9) Total planted rice acres.

- (10) Name, title, and signature of inspector.
- (11) Qualified rice disease inspector's certification number, if applicable.
- (g) Enforcement provisions shall be included to discourage false reporting.

 {Special editorial note: The following part of this subsection is nearly unchanged language that was previously contained in section 80157(b) of the May 2000 version of the proposed regulation. Therefore, except for two amended portions, the section is not underlined for purposes of clarity.}

Inspectors who perform fraudulent inspections shall be subject to permanent revocation of certification and other penalties provided by law. Growers who file false reports shall be deemed in noncompliance with California Health and Safety Code sections 41865 and 42402.2(b), and subject to other penalties provided by law.

Section 80157: Inspection Training Requirements for Conditional Rice Straw
Burning Permit Program for the Sacramento Valley Air Basin.

(a) The Basinwide Council, in consultation with CDFA and ARB, shall establish by agreement, a program to train and certify rice disease inspectors. The training program shall be implemented through an accredited agricultural educational facility, such as, but not limited to, the University of California Cooperative Extension.

Successful completion of the training course shall be a prerequisite to certification.

Trainers shall be experienced agricultural professionals with extensive in-field pest inspection and identification experience. A technical review course shall be required every two years to maintain certification. Training certification shall be available to required for Ppest Ccontrol Aadvisers (PCAs), growers, county agricultural commissioner's staff, and other qualified agricultural professionals. Agricultural commissioner staff shall be encouraged, though not required, to be trained through the program. Except for registered PCAs, growers, and county agricultural commissioner's staff, minimum qualifications for the training program certification shall be the following:

- (1) Three Four or more years of experience in the agricultural crop production industry, or
- (2) A four-year college degree in biological science, agriculture, or related field, or
- (3) Two or more years of college level education in biological science, agriculture, or related field <u>and</u> two or more years of experience in the agricultural crop production industry.
- (b) Inspectors who perform fraudulent inspections shall be subject to permanent revocation of certification and other penalties provided by law. Growers who file false reports shall be deemed in noncompliance with California Health and Safety Code section 41865 and subject to other penalties provided by law.
- (b) The certifications shall be issued by the training facility, such as the University of California Cooperative Extension, Basinwide Council, or agricultural commissioner. The certifications shall be revocable by the issuer for cause. Issuance of certification shall be based upon demonstrated knowledge of the following subject matter:
 - (1) Commonly occurring qualifying and nonqualifying rice diseases.
 - (2) Life cycle or etiology of rice diseases.
 - (3) Inspection methods and their statistical limitations.
 - (4) Techniques of prioritizing suitable test methods based upon field and disease characteristics.
 - (5) Penalties associated with fraudulent inspections and/or related documentation.
 - (6) Estimation of acreage of fields, acreage of inspection areas, and acreage of disease infected areas.
 - (7) Webster's stem rot disease severity quantification protocol [citation to be added] (Krause, R.A. & R.K. Webster, 1973, Phytopathology 63: 518-523).
 - (8) Webster's soil inoculum potential protocol for stem rot [citation to be added] (Krause, R.A. & R.K. Webster, 1972, Mycologia 64:1333-1337).
 - (9) Disease survey and detection techniques.

Section 80158: Annual Reporting Requirements for Conditional Rice Straw

Burning Permit Program for the Sacramento Valley Air Basin.

- (a) Beginning in 2001 and annually thereafter, the Basinwide Council shall submit to the ARB and CDFA, by July 30 15, a statement indicating the total acreage of rice planted in each county of the Sacramento Valley Air Basin for the current year.
- (b) Beginning in 2002 and annually thereafter, the Basinwide Council shall submit to the ARB and CDFA, by April June 30, a report on program implementation. The report shall include, but shall not be limited to, the following information, by county:
 - (1) General assessment of program operation.
 - (2) Total acres requested to be burned.
 - (3) Total acres determined by county agricultural commissioners to meet the terms and conditions for burning.
 - (4) Total acres approved for burning by the APCOs.
 - (5) Total acres burned.
 - (6) Total amount of planted acreage in the previous season.
 - (7) Number of enforcement actions initiated for fraudulent inspections, and resolution of each.
 - (8) Total amount of fees charged by each county agricultural commissioner.
- (c) Beginning in 2001 and annually thereafter, the Executive Officer shall, in consultation with CDFA, determine the disease significance threshold(s) for each qualifying disease and adopted inspection method, if applicable. The Executive Officer shall communicate the determination(s) to each agricultural commissioner, in writing, by July 1. Information considered in evaluating the annual disease significance threshold(s) shall include, but shall not be limited to, the most current scientific research on rice disease, the average market price of rice, government subsidy payments, average production costs, and average rice yields.

Section 80159: State Approval Procedures for Conditional Rice Straw

Burning Permit Program for the Sacramento Valley Air Basin.

The Executive Officer shall approve, approve with conditions, disapprove, or indicate intent to disapprove any program, portion of a program, or amendment of a program within 120 90 days after submittal by the Basinwide Council. Reasons for disapproval, conditional approval, or intent to disapprove shall be provided to the Basinwide Council in writing. The Basinwide Council shall resubmit an amended plan addressing the ARB's concerns within 90 days of the ARB's communication of disapproval, conditional approval, or intent for disapproval. If the Basinwide Council does not submit a program by March 1, 2001, or if the Executive Officer has not approved a program submitted by the Basinwide Council by May 1 July 15, 2001, the Executive Officer Air Resources Board shall develop and adopt an alternative program or portion thereof. An approved program may be amended by the Executive Officer with 90 days prior written notice to, in writing, and in consultation with, the Basinwide Council. The Basinwide Council may submit proposed program amendments to the Executive Officer for approval. The Executive Officer may request the submittal of program amendments from the Basinwide Council. No program, amendments, or portion thereof shall be implemented until approved in writing by the Executive Officer.